and **19** show specific lens data (Example 5) corresponding to the fifth configuration example (FIG. **5**). Similarly FIGS. **20** and **21** show specific lens data (Example 6) corresponding to the sixth configuration example (FIG. **6**). Similarly FIGS. **22** and **23** show specific lens data (Example 7) corresponding to the seventh configuration example (FIG. **7**). Similarly FIGS. **24** and **25** show specific lens data (Example 8) corresponding to the eighth configuration example (FIG. **8**). Similarly FIGS. **26** and **27** show specific lens data (Example 9) corresponding to the ninth configuration example (FIG. **9**).

In fundamental lens data shown in FIG. **10**, the field of the surface number Si shows the surface number of an i-th surface of surfaces as constituents correspondingly to the sign Si of the imaging lens shown in FIG. **1** when the surface the closest to an object except for the stop St is regarded as a first surface, and the numeric value of the suffix i (i=1 to 10) is increased sequentially as goes to the image side. The field of curvature radius R**1** shows the value of the curvature radius of the i-th surface from the object side, correspondingly to the reference sign Ri shown in FIG. **1**. Similarly in the field of the surface spacing Di, spacing on an optical axis between the i-th surface Si and the i+1-th surface Si+1 from the object is shown correspondingly to the reference sign shown in FIG. **1**. Values of the curvature radius Ri and the surface spacing Di are expressed by units of millimeters (mm). The fields of Ndj and νdj show values of the refractive index and the Abbe number of a j-th (j=1 to 5) lens element including the cover glass CG from the object side at the d-line (587.6 nm). The values of the curvature radii R**9** and R**10** of the two surfaces of the cover glass CG are 0 (zero). This means the surfaces are flat. The field of the surface spacing Di of the stop shows the distance (mm) between the surface S**1** and the stop St on the optical axis. The minus sign means the stop St is located on the image side of the surface S**1**. Various data including the focal length f (mm) of the system as a whole, the F number (FNO.), the back focus bf (mm), the distance (on air basis) TL (mm) between the object-side surface S**1** of the first lens G**1** and the imaging surface S_{img}, and the maximum image height Ih (mm) in the imaging surface are shown together in the margin of FIG. **10**.

In FIG. **10**, the sign * added to the left of the surface number Si designates the lens surface is an aspheric surface. In each example, all the opposite surfaces of the first to fourth lenses G1 to G**4** are aspheric surfaces. In the fundamental lens data, numeric values of curvature radii near the optical axis (near the paraxial axis) are shown as the curvature radii of these aspheric surfaces.

In each numeric value of aspheric data in FIG. **11**, the sign "E" designates the numeric value following the sign "E" is an "exponent" in base **10**, and the numeric value followed by the sign "E" is multiplied by the numeric value expressed by an exponential function in base **10**. For example, "1.0E-02" designates "1.0×10^{-2}".

The aspheric data include values of coefficients Ai and K in an equation of an aspheric surface shape expressed by the following equation (ASP). More specifically, Z designates the length (mm) of a perpendicular line dropped on a tangent plane (a plane perpendicular to the optical axis) of a summit of an aspheric surface from a point on the aspheric surface located at height h from the optical axis.

$$Z=C\cdot h^2/\{1+(1-K\cdot C^2\cdot h^2)^{1/2}\}+\Sigma A_i\cdot h^i \qquad \text{(ASP)}$$

where:

Z; depth (mm) of aspheric surface

h: distance (height) (mm) from optical axis to lens surface

K: eccentricity

C: paraxial curvature=1/R

(R: paraxial curvature radius)

A_i: i-order (i is an integer not smaller than 3) aspheric coefficient

In each of Examples 1-9, all the surfaces of the first to fourth lenses G1 to G**4** are aspheric. As for the aspheric coefficient A_i, 3 to 10 order coefficients A_3 to A_{10} are used effectively. In the third to eighth surfaces in Example 6 and the second to eighth surfaces in Example 7, 3 to 16 order coefficients A_3 to A_{16} are used effectively.

FIG. **28** shows values corresponding to the conditional expressions (1) to (7) in the respective examples together. As shown in FIG. **28**, all the values in the examples fall within the numeric value ranges of the conditional expressions (1) to (7).

FIGS. **29**A-**29**C show spherical aberration, astigmatism and distortion (distortional aberration) in the imaging lens of Example 1 respectively. Each aberration diagram shows aberration at the d-line as reference wavelength. The spherical aberration diagram also shows aberrations at the F-line (wavelength 486.1 nm) and the C-line (wavelength 656.3 nm). In the astigmatism diagram, the solid line shows aberration in a sagittal direction, and the broken line shows aberration in a tangential direction. Similarly, FIGS. **30**A-**30**C show various aberrations in Example 2. Similarly, FIGS. **31**A-**31**C show various aberrations in Example 3. Similarly, FIGS. **32**A-**32**C show various aberrations in Example 4. Similarly, FIGS. **33**A-**33**C show various aberrations in Example 5. Similarly, FIGS. **34**A-**34**C show various aberrations in Example 6. Similarly, FIGS. **35**A-**35**C show various aberrations in Example 7. Similarly, FIGS. **36**A-**36**C show various aberrations in Example 8. Similarly, FIGS. **37**A-**37**C show various aberrations in Example 9.

As is apparent from the aforementioned lens data and the aforementioned aberration diagrams, extremely excellent aberration performance is exhibited in each example. In addition, the total length is made compact.

The invention has been described above with some embodiments and examples. The invention is not limited to the embodiments and examples, but various modifications can be made. For example, the values of the curvature radius, the surface spacing and the refractive index of each lens element are not limited to the values shown in the corresponding numeric value example, but may be other values. In the aforementioned embodiments and examples, all the opposite surfaces of the first to fourth lenses are formed into aspheric surfaces, but they are not limited thereto.

The present application claims foreign priority based on Japanese Patent Application Nos. JP2005-283947 and JP2006-163875, filed Sep. 29 of 2005 and Jun. 13 of 2006, respectively, the contents of which is incorporated herein by reference.

What is claimed is:

1. An imaging lens comprising: in order from an object side of the imaging lens,

a first lens having a convex surface on the object side and having a positive power;

a second lens having a concave surface on the object side and having negative power;

a third lens having positive power; and

a fourth lens having a convex surface on the object side near a paraxial axis and having a meniscus shape,